

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-12. (Canceled)

13. (Previously Presented) A device forming an electromechanical or optical microsystem, the device comprising:

a first body and a second body welded together through a mechanical and electrical connection structure, the mechanical and electrical connection structure comprising:
an electrically conductive region welded between said first body and said second body; and

a unitary spacer arranged near said electrically conductive region and extending between the first and second bodies, the spacer having at least three sides defining a first cavity surrounding an active region or a plug of the electromechanical or optical microsystem.

14. (Original) The device according to claim 13, wherein said electrically conductive region is of a low-melting eutectic material.

15. (Original) The device according to claim 14, wherein said low-melting eutectic material is formed by alternating layers of gold and tin.

16. (Previously Presented) The device according to claim 13, wherein said spacer is of dielectric material.

17. (Original) The device according to claim 16, wherein said dielectric material is chosen from among a spun polymer, such as SU8, polyimide, a composite material formed by laminated polymer layers, such as a photosensitive stick foil, and oxynitrides.

18. (Previously Presented) The device according to claim 13, wherein said spacer also forms a completely enclosed second cavity surrounding said electrically conductive region.

19. (Previously Presented) The device according to claim 13, further comprising a metal region which extends on top of said second body and beneath said electrically conductive region.

20. (Original) The device according to claim 19, wherein said welding region and said metal region are of a material chosen from among titanium, gold and nickel.

21.-26. (Canceled)

27. (Previously Presented) A device forming an electromechanical or optical microsystem, comprising:

- a first body of semiconductor material;

- a first metal region, formed on a first surface of the first body;

- a second body of semiconductor material spaced apart from the first body;

- a spacer separating the first and second body and in contact with the first surface of the first body and a first surface of the second body, the spacer having at least three sides defining a first cavity between the first and second bodies;

- a second metal region, formed on a first surface of the second body; and

- a connection structure bonded to the first and second metal regions, forming thereby an electrical connection between the first and second metal regions, the connection structure being surrounded by the first cavity.

28. (Previously Presented) The device of claim 27 wherein the connection structure is a low-melting eutectic material welded to the first and second metal regions.

29. (Previously Presented) The device of claim 27 wherein, the first and second metal regions and the connection structure are formed within the first cavity defined by the spacer.

30. (Previously Presented) The device of claim 27 wherein the spacer further defines a completely enclosed second cavity between the first and second bodies, the device further comprising a micromechanical structure formed within the second cavity defined by the spacer.

31. (Original) The device of claim 27 wherein the first body of semiconductor material is formed of quartz.

32. (Original) The device of claim 31, further comprising a mirror formed on a second surface of the first body.

33. (Original) The device of claim 31, further comprising a diffractive lens formed on the second surface of the first body.

34. (Canceled)

35. (Previously Presented) The device of claim 13, wherein the active region comprises a suspended electromechanical structure.

36. (Previously Presented) The device of claim 13, wherein the active region comprises an optical structure.

37. (Previously Presented) The device of claim 36, further comprising a mirror formed on a surface of the first body opposite the optical structure.

38. (Previously Presented) The device of claim 36, further comprising:
a third body welded to the first body adjacent to the second body; and
an additional spacer formed between the first and third bodies and including a completely enclosed second cavity surrounding an additional active region of the microsystem.

39. (Previously Presented) The device of claim 38, further comprising first and second mirrors formed on opposite faces of the first body.

40. (Previously Presented) The device of claim 13 wherein the first and second bodies are wafers of semiconductor material.

41. – 54. (Canceled)

55. (Currently Amended) A device forming an electromechanical or optical microsystem, the device comprising:
a first body;
a second body spaced apart from the first body;
an active region of the microsystem, the active region being positioned between the first and second bodies; and
a single spacer extending between the first and second bodies and including a completely enclosed first cavity that surrounds the active region and that is defined by the spacer and the first and second bodies; and
an electrically conductive region welded between the first and second bodies and positioned adjacent to the spacer.

56. – 57. (Canceled)

58. (Previously Presented) The device of claim 55, wherein said electrically conductive region is of a low-melting eutectic material.

59. (Previously Presented) The device of claim 58, wherein said low-melting eutectic material is formed by alternating layers of gold and tin.

60. (Previously Presented) The device of claim 55, wherein said spacer is of dielectric material.

61. (Previously Presented) The device of claim 60, wherein said dielectric material is chosen from among a spun polymer, such as SU8, polyimide, a composite material formed by laminated polymer layers, such as a photosensitive stick foil, and oxynitrides.

62. (Previously Presented) The device of claim 55 wherein the active region comprises a suspended electromechanical structure.

63. (Previously Presented) The device of claim 55, wherein the active region comprises an optical structure.

64. (Previously Presented) The device of claim 63, further comprising a mirror formed on a surface of the first body opposite to the optical structure.

65. (Previously Presented) The device of claim 55, further comprising:
a third body welded to the first body and adjacent to the second body; and
an additional spacer extending between the first and third bodies and including a completely enclosed second cavity that surrounds an additional active region of the microsystem.

66. (Previously Presented) The device of claim 55 wherein the first and second bodies are wafers of semiconductor material.